

CLAIMS

1. (Currently amended) A method for identifying a compound that improves treatment of wounds to dermis or epidermis in a diabetic animal, the method comprising:

- a) producing a wound in the dermis or epidermis of the diabetic animal;
- b) exposing the wound to an aldose reductase inhibitor compound by topical application of the compound to the wound, wherein the topical application is to dermis or epidermis;
- c) comparing wound healing in the presence of the compound to wound healing in the absence of the compound; and
- d) identifying a compound that improves treatment of wounds to skin or another external body surface in the animal if the wound contracts more in a shorter period of time when treated in the presence of the compound than when the wound is treated in the absence of the compound.

2. (Previously presented) The method of Claim 1, further comprising the step of:

- e) comparing wound healing in the presence of a test compound with wound healing in the presence of a control aldose reductase inhibitor, wherein the test compound is identified as a compound that improves treatment of wounds to or another external body surface in an animal if the wound heals at least as rapidly, completely or less painfully in the presence of the test compound as in the presence of the control aldose reductase inhibitor.

3. (Original) The method of Claim 1, wherein the animal is a mammal.

4. (Original) The method of Claim 1, wherein the animal is a human.

5. (Canceled)

6. (Original) The method of Claim 1, wherein the wound is to skin on an animal.

7. (Original) The method of Claim 1, wherein the wound is produced by punch biopsy.

8. (Withdrawn) A method for treating wounds in a diabetic animal, comprising administering to the animal a compound that improves treatment of wounds to skin or another external body surfaces in an animal in an amount effective to improve wound healing in the animal, wherein the compound is identified according to the method of claim 1.

9. (Withdrawn) The method of claim 8, wherein the animal is a mammal.

10. (Withdrawn) The method of claim 8, where in the animal is a human.

11. (Withdrawn) The method of claim 8, where in the human is a diabetic.

12. (Withdrawn) The method of claim 1, wherein the test compound is an aldose reductase inhibitor.

13. (Currently amended) A method for identifying a compound that improves diabetic neuropathy or neurological disorders associated with diabetes, the method comprising:

- a) producing a wound in the dermis or epidermis of a diabetic animal;
- b) exposing the wound to an aldose reductase inhibitor compound by topical application of the compound to the wound, wherein the topical application is to dermis or epidermis;
- c) comparing wound healing in the presence of the compound to wound healing in the absence of the compound; and
- d) identifying a compound that improves diabetic neuropathy or neurological disorders associated with diabetes if the wound contracts more in a shorter period of time when treated in the presence of the compound than when the wound is treated in the absence of the compound.

14. (Previously presented) The method of Claim 13, further comprising:

- e) comparing wound healing in the presence of a test compound with wound healing in the presence of a control aldose reductase inhibitor, wherein the test compound is identified as a compound that improves diabetic neuropathy or neurological disorders associated with diabetes if the wound heals at least as rapidly, completely or less painfully in the presence of the compound as in the presence of the control aldose reductase inhibitor.

15. (Original) The method of Claim 13, wherein the animal is a mammal.
16. (Original) The method of Claim 13, wherein the animal is a human.
17. (Canceled)
18. (Original) The method of Claim 13, wherein the wound is to skin on an animal.
19. (Previously Presented) The method of Claim 13, wherein the wound is produced by punch biopsy.
20. (Withdrawn) A method for treating diabetic neuropathy or neurological disorders associated with diabetes in a diabetic animal, comprising administering to the animal compound that improves treatment of wounds to skin or another external body surfaces in an animal in an amount effective to improve diabetic neuropathy or neurological disorders associated with diabetes in the animal, wherein the compound is identified according to the method of claim 13.
21. (Withdrawn) The method of claim 20, where the animal is a mammal.
22. (Withdrawn) The method of claim 20, where the animal is a human.
23. (Withdrawn) The method of claim 20, where the human is a diabetic
24. (Withdrawn) The method of claim 13, wherein the test compound is an aldose reductase inhibitor.
25. (Original) The method of Claim 2, wherein the animal is a mammal.
26. (Original) The method of Claim 2, wherein the animal is a human.
27. (Canceled)
28. (Original) The method of Claim 2, wherein the wound is to skin on an animal.
29. (Original) The method of Claim 2, wherein the wound is produced by punch biopsy.
30. (Original) The method of Claim 14, wherein the animal is a mammal.
31. (Original) The method of Claim 14, wherein the animal is a human.
32. (Canceled)

33. (Original) The method of 14, wherein the wound is to skin on an animal.

34. (Original) The method of 14, wherein the wound is produced by punch biopsy.

35. (Previously Presented) A method of healing or treating wounds using an aldose reductase inhibitor identified by the method of claims 1 or 13.

36. (Currently amended) A method for identifying a compound that improves treatment of wounds to dermis or epidermis in a diabetic animal, the method comprising:

- a) producing a wound in the dermis or epidermis of the diabetic animal;
- b) exposing the wound to an aldose reductase inhibitor compound by topical application of the compound to the wound, wherein the topical application is to dermis or epidermis;
- c) calculating the wound size and degree of wound contraction as:
$$\{(\text{size of wound at day 0} - \text{size of wound at day X}) / \text{size of wound at day 0}\} \times 100;$$
- d) comparing wound healing in the presence of the compound to wound healing in the absence of the compound; and
- e) identifying a compound that improves treatment of wounds to skin or another external body surface in the animal if the wound contracts more in a shorter period of time when treated in the presence of the compound than when the wound is treated in the absence of the compound.

37. (Previously presented) The method of Claim 36, further comprising the step of:

- f) comparing wound healing in the in the presence of a test compound with wound healing in the presence of a control aldose reductase inhibitor, wherein the test compound is identified as a compound that improves treatment of wounds to the dermis or epidermis in an animal if the wound heals at least as rapidly, completely or less painfully in the presence of the test compound as in the presence of the control aldose reductase inhibitor.

38. (Previously Presented) The method of claim 36, where the animal is a mammal

39. (Previously Presented) The method of claim 36, where the animal is a human.
40. (Previously Presented) The method of claim 36, wherein the wound is produced by punch biopsy.
41. (Currently amended) A method for identifying a compound that improves diabetic neuropathy or neurological disorders associated with diabetes, the method comprising:
- a) producing a wound in the dermis or epidermis of a diabetic animal;
 - b) exposing the wound to an aldose reductase inhibitor compound by topical application of the compound to the wound, wherein the topical application is to dermis or epidermis;
 - c) calculating the wound size and degree of wound contraction as:
$$\frac{\{(\text{size of wound at day 0} - \text{size of wound at day X}) / \text{size of wound at day 0}\} \times 100}{100};$$
 - d) comparing the wound healing in the presence of the compound to wound healing in the absence of the compound; and
 - e) identifying a compound that improves diabetic neuropathy or neurological disorders associated with diabetes if the wound contracts more in a shorter period of time when treated in the presence of the compound than when the wound is treated in the absence of the compound.
42. (Previously Presented) The method of Claim 41, further comprising:
- f) comparing wound healing in the presence of a test compound with wound healing in the presence of a control aldose reductase inhibitor, wherein the test compound is identified as a compound that improves diabetic neuropathy or neurological disorders associated with diabetes if the wound heals at least as rapidly, completely or less painfully in the presence of the compound as in the presence of the control aldose reductase inhibitor.
43. (Previously Presented) The method of Claim 41, where the animal is a mammal.

44. (Previously Presented) The method of Claim 41, where the animal is a human.
45. (Previously Presented) The method of Claim 41, wherein the wound is produced by punch biopsy.